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ROTATION MECHANISM FOR BICHROMAL BALLS OF A TWISTING BALL DISPLAY SHEET BASED ON CONTACT POTENTIAL **CHARGING** [75] Inventor: Edward A. Richley, Palo Alto, Calif. [73] Assignee: **Xerox Corporation**, Stamford, Conn. Appl. No.: 08/866,536 [21] [22] Filed: May 30, 1997 [51] [58] 345/55, 107

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[56]

U.S. PATENT DOCUMENTS

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[57] ABSTRACT

A twisting ball display sheet is disclosed which utilizes a mechanism other than Zeta potential to create dipole moment to rotate a plurality of bichromal balls. The twisting ball display sheet comprises a transparent sheet which contains a plurality of bichromal balls. Each bichromal ball comprises two hemisphere. Each hemisphere has a material which has a different work function than the work function of the other hemisphere. The two different work functions of each bichromal ball create a dipole moment which at the presence of a proper electric filed will cause the bichromal ball to rotate.

22 Claims, 5 Drawing Sheets

